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Cassnor Peak II Project
Upper Willamette Resource Area
BLM Eugene District

Environmental Assessment No. OR 090 EA 04-18

Background

In April 2004, we issued an environmental assessment (EA) for the Cassnor Peak Project, EA-04-11. Upon additional field investigation, we found that the description of the proposed action did not correctly state current conditions or what we proposed to do. So, we are issuing a new EA, Cassnor Peak II Project EA-04-18. The first EA, Cassnor Peak Project, can be considered moot as no decision will be made on it. The two most significant changes from the first EA to the second EA are 1) the proposed action will harvest blown down trees and standing trees, not just blown down trees 2) no harvest will occur in riparian reserves.

1.0 Purpose and Need for Action

The Upper Willamette Resource Area proposes regeneration harvest on approximately 12 acres in T. 14 S., R. 1 E., Section 19. A winter storm in 2001 blew over approximately two thirds of the stand leaving approximately one third of the trees standing or leaning. Those trees still standing would not leave a fully stocked stand if left uncut while at the same time would provide too much shade to promote growth of a Douglas-fir under story. The windthrow has created a high fuel risk to this stand as well as adjacent mature stands and young plantations. The land use allocation in the project area is matrix.

The need is established in the Eugene District Record of Decision and Resource Management Plan (RMP) (June 1995), which directs that timber be harvested from the Matrix LUA. The purpose of the action is also established in the Eugene District RMP and is:

- to provide a sustainable supply of timber.
- to salvage timber damaged by windstorms consistent with management objectives for other resources.
- to manage timber stands to reduce the risk of stand loss from fires, animals, insect and diseases.
- to manage developing stands on available lands to promote tree survival and growth.
- to modify fuel profiles in order to lower the potential of fire ignition and rate of spread.

1.1 Conformance

All Alternatives are in conformance with the Eugene District Resource Management Plan (RMP) (June 1995), as amended. This document is available for review at the BLM Eugene District Office or on the internet at http://www.or.blm.gov/nwfp.htm. The Cassnor Peak II project file contains additional information used by the interdisciplinary Team (ID Team) to analyze impacts and alternatives and is available for review at the Eugene District Office.

2.0 Alternatives Including the Proposed Action

This section describes alternatives identified by the ID Team and design features associated with these alternatives. See Appendix B for maps of the proposed harvest area.

2.1 Alternative 1: No action

No trees would be removed, no reduction in fuel loading, nor any road construction actions would occur within the project area at this time.

2.2 Alternative 2: Proposed Action

Regeneration harvest would occur on approximately 12 acres of predominately windthrown timber. Of the trees proposed to be harvested approximately 65 percent are windthrown and approximately 35 percent are standing green. Cable yarding would be the primary method for removing the windthrown trees. However, because the trees were felled by wind, some ground based equipment may be used to realign trees and yard areas difficult to reach by a cable system. A soil scientist and a contract administrator would coordinate the use of all ground based equipment. An average of 240 linear feet of down wood and 6-8 standing green trees/acre would be reserved within the harvest area. When possible, unless considered a hazard to the operations, all snags would be reserved.

There would be 400-600 feet of new temporary road construction. New road construction would be tilled and planted upon completion of harvest and site preparation activities. No roads would be constructed within Riparian Reserves.

Following harvest, the logging slash would be piled by hand or excavator to create planting spots and to reduce fuel loading. The area would be planted with Douglas-fir, grand fir and incense cedar.

2.3 Design Features

- Management activities would be altered according to RMP standards and guidelines and BLM policy if any cultural resources or Special Status Plants or Wildlife, including Threatened and Endangered, or E-4 Special Provision species, are found in or affected by harvest or other project activities.

- Seasonal Restrictions - There will be no activities between March 1- July 15 within 65 yards of the stands of green trees that are north and west of the proposed project area. These restrictions may be waived by a wildlife biologist if it is determined that nesting spotted owls would not be disturbed by proposed activities.

- Existing Coarse Woody Debris Retention - Retain all existing Class 3-5 course woody debris (CWD) on site. This CWD does not count toward the minimum down log retention levels in the project area. Minimize damage to existing coarse woody debris where possible. Existing CWD that presents a hazard to logging or other project operations may be relocated within the project area.

- Coarse Woody Debris Retention - Retain 240 linear feet per acre of Class 1 and 2 CWD. Retain the largest trees that are >20' long and >20" in diameter at the large end. CWD with a diameter smaller than this may be retained if there are operational obstacles that would result in damaging standing trees, existing snags, or other resources. CWD lengths that are less than 20" at the large end cannot be counted toward the 240 ft/ac minimum.

- Green Tree Retention – Retain three standing trees per acre in addition to the 6-8 trees per acre to be retained as legacy trees. These additional three trees per acre would be used for future snag recruitment.

- Snags - Retain all existing snags greater than or equal to 16 inches in diameter that do not pose a safety hazard or an operational obstacle. Snags felled as danger trees would be retained on site as down logs in addition to the basic down log retention requirements. Where possible green trees would be retained around snags if doing so would alleviate the need to remove snags as safety hazards.

- Snag Creation - Snags would be created adjacent to the proposed project area. Two to five snags per acre would be created by chainsaw topping and girdling. Live trees selected for snag creation would vary in size and tree species. Future activities would include creating snags within the project area from the three trees/acre left for this purpose.

- Riparian Reserve Management - No harvest would occur in the riparian reserves.

- Directional yarding would be utilized for protection of retention trees, down logs, snags, and reserve areas.

- One end suspension of logs would be required wherever feasible.

- Where subgrade conditions allow, the temporary road would be tilled with an excavator to a depth of 24 inches. If this cannot be accomplished in the same operating season, the road would be left in an erosion resistant condition and blocked. This would include the construction of drainage dips, waterbars, or leadoff ditches. The road would be blocked with an earthen barrier, slash and/or brush piles to prevent vehicle access.

- The residual slash would be piled with an excavator or by hand. Generally, material less than 9 inches in diameter would be piled for burning. Burn piles would be widely scattered and would occupy less than 5 percent of the treated area.

- Burning would occur in the winter when duff and litter moisture content is high enough to minimize consumption of duff and organic litter.

3.0 Affected Environment

3.1 Vegetation

The overstory consists of mature Douglas-fir. A survey was done for Special Status species and none were found.

3.2 Wildlife

Bald Eagle (Threatened) - Suitable nesting habitat for bald eagles is generally mature forest within one mile of a lake, river or major tributary. Although there is older forest within 0.25 mile of the project area, the project area does not have the appropriate stand structure or large enough trees to provide suitable habitat for this species. Effects to this species will not be analyzed in this document.

Northern Spotted Owl (Threatened) - Suitable nesting habitat for this species is mature forest (generally greater than 80 years old) with high canopy cover, an open understory, large down logs and large snags. There is no suitable habitat within the project area. There is suitable habitat immediately adjacent to the project area.

Dispersal habitat for spotted owls is generally defined as stands ranging from 40 to 79 years of age. There is no dispersal habitat within the proposed project area.

3.3 Fuels and Air Quality

The proposed project area is 12.5 miles east of the Willamette Designated Area (DA) as defined in the State Implementation Plan for air quality. The immediate unit boundaries are surrounded by BLM land. The existing fuels constitute Fuel Model 13 which represents the heaviest of the 13 standard fuel models.

3.4 Fisheries

Spring run chinook salmon (*Oncorhynchus tshawytscha*) and winter run steelhead trout (*Oncorhynchus mykiss*) are federally listed by the National Oceanic and Atmospheric Administration Fisheries (NOAA)) as threatened species and are known to utilize the Calapooya River which is part of the Upper Willamette River Evolutionary Significant Unit (ESU). The Calapooya River is considered critical habitat for listed salmon and trout species and is classified as EFH (Essential Fish Habitat) by NOAA for spring run Chinook salmon.

Resident fish use of the two small, unnamed streams which flow perennially through the project area is unknown. As such, it is assumed for the purposes of this proposed project that resident trout and other non-salmonid species may be present.

3.5 Hydrology and Water Quality

All streams within the project area are unnamed tributaries that flow directly into the main stem of the Calapooya River. Two perennial streams border the north side of the project. These are incised and show signs of down cutting. Two low gradient intermittent channels with broad floodplains form the southern boundaries.

Water Temperature: The Calapooya River is listed on the 2002 Department of Environmental Quality (D.E.Q) Limited List (303(d)). The river is listed for elevated summer temperatures from river mile 0 to 43.

Sediment/Turbidity: Neither the Calapooya River or any of its tributaries are listed on the D.E.Q. 303(d) list for sedimentation.

Chemical Contamination/Nutrients: Development of the Calapooya River Valley and commercial forestry practices higher in the watershed has increased the likelihood of pollutants entering the surface waters, particularly in the lower portion of the watershed. The main stem is listed on the 2002 D.E.Q. list for elevated levels of fecal coliform during winter, spring, and fall.

3.6 Soils

Current Condition – In general, the soil within the project area has been impacted by uprooting via the windthrown trees but is considered intact. No previous timber harvest related activity or road construction has occurred in the proposed project area.

Slopes vary from level to over 40 percent, with the steeper areas just off the broad flat ridge. Soils are fairly diverse also. The dominant soil is Bellpine silty clay loam. This soil is moderately deep, averaging 33 inches. The heavy clay subsoil commonly has less than 15 percent fragments, creating slow internal drainage and making the soil very prone to compaction. Resiliency and plant available water are both moderately high.

Two areas (approximately 2 acres) contain shallow soils with more coarse content. These soil inclusions occur on a portion of the ridgetop and south aspect, as well as a strip on the north end. Soil depth in these areas averages less than 20 inches to durable weathered sandstone with few fractures. Bare soil surface with gravel is common. The limited depth would restrict planting and seedling survival in these portions.

4.0 Environmental Consequences

This EA incorporates the analysis of cumulative effects in *The Eugene District RMP, November, 1994* (Chapter 4), as amended. The following analysis has an effects section that supplements those analyzed in the above document, and provides site-specific information and analysis particular to the alternatives considered here.

4.1 Alternative 1: No Action

4.1.1 Fuels

The current dead fine fuel loading (0 - 3.0" diameter) would return to normal background levels within 5-7 years if the no action alternative is undertaken. The larger diameter dead fuels would persist much longer with the large diameter tree boles remaining on site for decades. Some natural tree regeneration may occur however, the site would likely be dominated by brush for an extended period of time. The large diameter material would act as a barrier to fire suppression in the event of a wildfire as well as increase site specific fire severity in terms of long duration fire and subsequent indirect effects to long-term soil productivity. The probability of a wildfire occurring or moving into the proposed project area is low but if such an event did occur there would be a high risk of damage to soil productivity on site.

4.2 Alternative 2: Proposed Action

4.2.1 Fuels

Little or no ladder fuels will be present after harvest. Fuels will be heavier in the 100 foot riparian buffer due to a greater abundance of large material (>9" dia.). This treatment will result in a total fuel loading that is similar to what was present prior to the wind event that resulted in the extensive blow down.

4.2.2 Soils

Surface soil and organic material would be displaced, and soil would be locally compacted within yarding corridors. Cable yarding systems typically result in two percent or less of the harvest area left in a compacted condition, a level within our District standards for achieving insignificant growth loss effects on matrix lands. Corridor width and total spatial extent of disturbance would probably exceed the norm (5%) due to large tree size and lack of directional felling. Some localized erosion would occur within yarding corridors in the short term. Full ground cover recovery is expected within 3 to 5 years. The potential for sediment delivery is negligible given the site conditions and width of the no treatment streamside buffers.

No long term soil productivity losses are anticipated. In excavated portions of the project area, full productivity would not be restored for decades, due to loss of surface soils and organic matter.

4.2.3 Unaffected Resources

The following are either not present or would not be affected by any of the alternatives: Cultural resources, prime or unique farm lands, flood plains, solid or hazardous wastes, Wild and Scenic Rivers, and Wilderness Areas.

4.2.4 Special Status Species

Threatened and Endangered Species

Northern spotted owl
The proposed salvage would degrade the suitable habitat adjacent to the project area by decreasing the available down wood immediately adjacent to this habitat. This salvage may affect, but is not likely to adversely affect spotted owls because a minimum of Northwest Forest Plan levels of down logs would be retained in the project areas. Removal of standing green trees would not affect spotted owls because the project area is not currently dispersal or suitable habitat for this species.

The seasonal restriction from March 1 to July 15 would eliminate disturbance during the critical nest season, so there would be no adverse effects to spotted owls.

Special Status Plants

Surveys were completed and no Special Status plants were found.

4.2.5 Air Quality

Smoke emissions from the burning of piles will be of short duration; however, the final decision will be made by ODF through daily Smoke Management Instructions. The burning of piles will occur between November 1 and January 1 when the most favorable emission dispersion conditions are possible. Burning of piles may occur over a several day period. It is not anticipated that the burning of the piles will exceed the National Ambient Air Quality Standards (NAAQS) or the State Implementation Plan (SIP) for air quality.

4.2.6 Fisheries

The level and extent of the proposed action would not directly or indirectly affect listed fish species habitat. The total amount of acres proposed for salvage with the proposed timber management prescription would not be expected to affect fish habitat. Buffers (100 feet) placed in riparian areas around streams would be sufficient to essentially filter any materials mobilized during the harvest activities and prevent entry into the stream systems and would retain sufficient large wood material to protect streambanks. Proposed levels of harvest and salvage would not affect local stream temperatures or flows and therefore, would not affect downstream listed species habitat.

The proposed salvage would not affect spring run Chinook salmon, steelhead trout, or Essential Fish Habitat (EFH) in the Calapooya River. Distances to known habitat, riparian buffers, and retention of large quantities of large woody debris would assure protection of the listed species, resident fish populations, and EFH.

4.2.7 American Indian Rights

No impacts on American Indian social, economic, or subsistence rights are anticipated. No impacts are anticipated on the American Indian Religious Freedom Act. Management action information was sent to the Confederated Tribes of the Grand Ronde and Confederated Tribes of the Siletz.

4.2.8 Environmental Justice

To comply with Executive Order 12898 of February 11, 1994, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, the Bureau of Land Management, Eugene District, will ensure that the public, including minority communities and low income communities, have adequate access to public information relating to human health or environmental planning, regulations, and enforcement as required by law.

The District has not identified any environmental effects, including human health, economic and social effects of Federal actions, including effects on minority populations, low-income populations, and Native American tribes, in this analysis.

5.0 List of Agencies and Persons Consulted

Letters were sent to the adjacent landowners and the project was discussed at the Calapooya Watershed Council meeting on March 10, 2004. This Environmental Analysis is being mailed to the following members of the public or organizations who have requested to be on the mailing list:

Calapooia Watershed Council
Bud Baumgartner
Tim Jackson
Denise Hoffert-Hay
Lavinia Ross
Virgil Morris
Robert A Bostedt
Pete Vanderlip
Carol Logan, Kalapooya Sacred Circle Alliance
Roseburg Forest Products
Peter Saraceno
Sierra Club – Many Rivers Group
Craig Tupper
Jan Wroncy
Chandra Leque – ONRC
John Bianco
Jim Goodpasture
Swanson Group
Oregon Dept of Fish & Wildlife
Oregon Dept of Forestry
Oregon DEQ
The Pacific Rivers Council
Pam Hewitt
John Poynter
Leroy Pruitt
Charles & Reida Kimmel
Lane County Land Management
Neal Miller
Kris and John Ward
Robert P Davison
Tom Stave, U of O Library
John Muir Project
James Johnston
Molly Widmer
David Simone
Bart Pratt
Rich Wright
Timber Service Company

6.0 List of Preparers

NAME	RESOURCE
Mark D'Aversa	Fisheries
Fred Kallien	Silviculture / Fuels
Paula Larson	Wildlife
Cheshire Mayrsohn	Botany
Dave Reed	Fuels
Ricardo Rodríguez	Logging Systems / EA writer
Mike Sabin	Engineering / Roads
Mike Southard	Cultural Resources
Rudy Wiedenbeck	Soils / Hydrology
Trish Wilson	Team Lead / Facilitator

Appendix A

Maps